

Docket No. DE 2305.02 US
USSN: 09/866,337

PATENT
Art Unit: 2872

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

Claim 1: (Currently Amended) An optical device used in an optical read/write head comprising a first light-penetrable material having a first side and a second side wherein a first reflecting light of the first side has a different angle from a second reflecting light of the second side wherein the second reflecting beam passes through the first side and causes a refractive light at an identical optical axis; the first and second lights being generated at different timing, the optical device being in an optical system of the optical read/write head having a bending optical path.

Claim 2: (Canceled)

Claim 3: (Previously Presented) The optical device according to claim 1, wherein the first light is a laser beam.

Claim 4: (Previously Presented) The optical device according to claim 1, wherein the second light is a laser beam.

Claim 5: (Previously Presented) The optical device according to claim 1, wherein the first and second sides include first and second optical coating planes respectively, the first and second planes being parallel.

Claims 6-7: (Canceled)

Docket No. DE 2305.02 US
USSN: 09/866,337

PATENT
Art Unit: 2872

Claim 8: (Previously Presented) The optical device according to claim 5, wherein the first optical coating plane and the second optical coating plane are respectively coated on two opposite sides of a first light-penetrable material.

Claim 9: (Previously Presented) The optical device according to claim 8, further comprising a second light-penetrable material for reflecting a third light to the optical axis.

Claim 10: (Previously Presented) The optical device according to claim 9, wherein a third optical coating plane is coated on the second light-penetrable material, and the third light passes through the first optical coating plane and the second optical coating plane and then the third light is reflected to the optical axis by the third optical coating plane.

Claim 11: (Currently Amended) An optical device used in an optical read/write head comprising plural optical planes for reflecting at least one laser beam and for refracting a reflective beam to an identical optical axis at different angles and at different timing, the optical device being in an optical system of the optical read/write head having a bending optical path.

Claim 12: (Currently Amended) An optical device used in an optical read/write head comprising a first coating optical plane and a second optical coating plane coated on two opposite sides of a light-penetrable material for reflecting a first light and for refracting a second reflective light to an identical optical axis at different angles and at different timing, the optical device being in an optical system of the optical read/write head having a bending optical path.

Docket No. DE 2305.02 US
USSN: 09/866,337

PATENT
Art Unit: 2872

Claim 13: (Previously Presented) The optical device according to claim 12, further comprising a second light-penetrable material for refracting a third reflective light to the optical axis.

Claim 14: (Currently Amended) An optical system for writing to and reading from an optical disc, comprising:

a plurality of light beams;

an optical component comprising a plurality of optical planes for respectively reflecting at least one light beam of the plurality of light beams and refracting a reflective beam to an identical optical axis at different angles and different timing, wherein the optical system has a bending optical path; and

a mirror configured to direct any one of the light beams oriented at the identical optical axis to the surface of said optical disc.

Claim 15: (Previously Presented) The optical system of claim 14, further comprising:

a plurality of light sources combined together in the same pack wherein the plurality of light beams are produced, respectively, from the plurality of light sources.

Claim 16: (Canceled)

Claim 17: (Currently Amended) A method of directing multiple light beams to the surface of an optical disc, comprising the steps of:

directing a plurality of light beams to a plurality of optical planes which respectively reflect at least one light beam and refracted at a reflective beam to an identical optical axis at different angles and different timing; and

Docket No. DE 2305.02 US
USSN: 09/866,337

PATENT
Art Unit: 2872

directing by a mirror any one of said plurality of light beams oriented at said identical optical axis to the surface of said optical disc, wherein the reflective beam to the identical optical axis has a bending optical path to the optical disc.

Claim 18: (Currently Amended) An optical device used in an optical read/write head comprising a first light-penetrable material having a first side and a second side wherein a first reflecting light of the first side has a different angle from a second reflecting light of the second side wherein the second reflecting beam passes through the first side and causes a refractive light at an identical optical axis; the first and second lights being generated [[non-simutaneously]] non-simultaneously, the optical device being in an optical system of the optical read/write head having a bending optical path.

Claim 19: (Previously Presented) The optical device according to claim 18, wherein the first and second lights are laser beams.

Claim 20: (Previously Presented) The optical device according to claim 18, wherein the first and second sides include first and second optical coating planes respectively, the first and second planes being parallel.